Saskatchewan
Agriculture
and Food

The Saskatchewan Beef Development Fund
Annual Report 1999 - 2000

September 10, 2000

To Her Honour,
The Honourable Linda Haverstock
Lieutenant Governor
Province of Saskatchewan

Madam:

I have the honour to submit herewith the Annual Report of the Saskatchewan Beef Development Board for the twelve months ending March 31, 2000.

I have the honour to be, Madame,
Your obedient servant,

Clay Serby

Clay Serby
Deputy Premier
Minister of Agriculture and Food

Saskatchewan Beef Development Fund
Room 329, 3085 Albert Street, Regina, Saskatchewan, S4S 0B1
Telephone: (306) 787-6566 Fax: (306) 787-2654

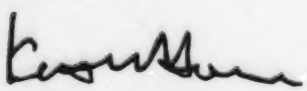
September 10, 2000

Honourable Clay Serby
Deputy Premier
Minister of Agriculture and Food
Room 307, Legislative Building
Regina, Saskatchewan
S4S 0B3

Dear Sir:

I am pleased to present herewith the Annual Report of the Saskatchewan Beef Development Board for the twelve months ending March 31, 2000.

Respectfully submitted,



Keith Howse, Chairperson
Saskatchewan Beef Development Board

Board Personnel

Board of Directors

Mr. Keith Howse, Chairperson	Pangman
Ms. Sandra Schneider	Medstead
Mr. Harold Yelland	Porcupine Plain
Mr. Calvin Knoss	Rockglen
Mr. George Siemens	Fiske
Mr. Lorne Cholin	Kerrobert

Staff

Staff services are provided through the Agriculture Research Branch and Administrative Services Branch of the Saskatchewan Department of Agriculture and Food.

Dr. A. Hamid Javed	Secretary
Mrs. Wendy Darmochid	Financial Records
Mr. Ken Petruic	Financial Manager
Ms. Tammy Bast	Database Co-ordinator/Financial Records

Activities Report 1999 - 2000

This report covers the 1999-00 fiscal year of operation of the Saskatchewan Beef Development Board (SBDB)

The SBDB was established on June 28, 1994, to administer the Beef Development Plan and utilize the funds saved due to the termination of the National Tripartite Stabilization Program and the surplus from the Saskatchewan Beef Stabilization Board marketing account.

The funding available to the SBDB on a one-time basis was $1.8 million (from Saskatchewan Beef Stabilization Board marketing account) and $1.4 million from the provincial government for the transition Beef Industry Development Fund (to replace the provincial share in the National Tripartite Stabilization Program funds).

The SBDB Fund supports the development and diversification of Saskatchewan's beef industry through the funding of projects related to production research, including nutrition, management, disease prevention and pest control, reproduction, animal welfare, and environmental impact, technology transfer, and development and promotion of new products.

The SBDB held its first meeting of the year on April 8, 1999, to review the Research and development project proposals received on January 15, 1999, and to meet with the Minister of Agriculture and Food. Two more Board meetings were held on October 22, 1999 and March 9, 2000.

The salient decisions of the SBDB during the year 99/00 include:

- The SBDB approved its budget for 1999-00 fiscal year.
- The SBDB approved its updated brochure with project information.
- The SBDB met with the Saskatchewan Minister of Agriculture and Food on April 8, 1999 and on
  March 9, 2000 to discuss various issues of mutual interest.
- The SBDB approved eight projects (out of 16 proposals) in its April 8, 1999 meeting, one special project in its October 22, 1999 meeting and two projects (out of 4 proposals) in its March 9, 2000 meeting.
- The approved projects covered beef quality, algae toxin detection, red veal production, health and feeding management, electric fence energizer evaluation, leafy spurge control, oral immunization, bovine viral diarrhea, membership in Farm Animal Council of Saskatchewan and Saskatchewan Plant Material Center.
- The SBDB invited the researchers to present research progress and results to the Board and other researchers.

Management Report

Management is responsible for the integrity of the accompanying financial statements and all other information in this Annual Report. It is the responsibility of management to prepare financial statements in accordance with generally accepted accounting principles in Canada.

The integrity of the financial records from which these financial statements are prepared is largely dependent on management's systems of internal accounting controls. The purpose of such systems is to provide reasonable assurance that transactions are appropriately recorded in order to permit preparation of financial statements; and, assets are properly accounted for and safeguarded against loss from unauthorized use. Underlying this concept of reasonable assurance is the fact that limitations exist in any system of internal accounting controls based on the premise that the cost of such controls should not exceed the benefits derived therefrom.

The Board of Directors is responsible for ensuring that management fulfills its responsibilities for financial reporting and internal control. The Board meets periodically with management to satisfy itself that management's responsibilities are properly discharged, and reviews and approves the financial statements and annual report.

The Provincial Auditor of Saskatchewan has audited the financial statements. His report to the Members of the Legislative Assembly, stating the scope of the examination and opinions on the financial statements, appears on the following pages.

The financial statements have been examined and approved by the Board.

Mr. Gordon Nystuen
Deputy Minister
Department of Agriculture and Food

Mr. Ken Petruic
Manager, Financial Services
Department of Agriculture and Food

September 10, 2000

The Beef Development Fund

The Beef Development Fund (BDF) supports the development and diversification of Saskatchewan's beef industry through the funding of projects related to production research, technology transfer, and development and promotion of new products.

The fund was established in 1994 utilizing funds saved due to the termination of the National Tripartite Stabilization Program for Cattle and the marketing surplus from the Saskatchewan Beef Stabilization Board marketing account.

Approval Process
After each deadline date, project proposals are reviewed and considered for approval by the BDF Board. Applicants are advised of the Board's decision within 60 days. Successful applicants are invited to enter into a contract with the Saskatchewan Beef Development Fund.

Applications Forms
Applicants can use Saskatchewan Agriculture and Food Agriculture Development Fund (ADF) Project Application Forms, available from the Agriculture Research Branch of Saskatchewan Agriculture and Food, Room 329, 3085 Albert St., Regina, Sask., S4S 0B1, or all Saskatchewan Agriculture and Food Rural Service Centres throughout the province.

Application Dates
The deadline for applications is January 15 of each year.

Funding
Approved projects are eligible for funding of up to 100 percent of eligible costs. The decisions are based on the benefit to the beef industry.

Eligible Costs
- professional or technical salaries and fees
- equipment rentals
- materials and supplies
- project travel
- workshop or seminar costs

Ineligible Costs
- overhead expenses
- purchase of land or buildings
- major capital expenses
- expenditures made on a project prior to BDF funding approval

Project Details
When applying for project funding, it is important for applicants to provide as much detail as possible. Board decisions are based on the information provided in the applications.

Please describe the following items thoroughly:
- the justification for and impact of the project
- budget details (include quotes if applicable)
- coinvestigators (include support or assistance provided)
- potential market or markets

Saskatchewan Beef Development Board

FINANCIAL STATEMENTS

For the year ended March 31, 2000

Provincial Auditor Saskatchewan

1500 Chateau Tower
1920 Broad Street
Regina, Saskatchewan
S4P 3V7

Phone: (306) 787-6398
Fax: (306) 787-6383
Internet e-mail: info@auditor.sk.ca

AUDITOR'S REPORT

To the Members of the Legislative Assembly of Saskatchewan

I have audited the statement of financial position of the Beef Development Board as at March 31, 2000 and the statement of revenue, expenditure and net assets for the year then ended. The Board's management is responsible for preparing these financial statements for Treasury Board's approval. My responsibility is to express an opinion on these financial statements based on my audit.

I conducted my audit in accordance with generally accepted auditing standards. Those standards require that I plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In my opinion, these financial statements present fairly, in all material respects, the financial position of the Board as at March 31, 2000 and the results of its operations and its cash flows for the year then ended in accordance with generally accepted accounting principles.

Regina, Saskatchewan
August 15, 2000

Fred Wendel, CMA, CA
Acting Provincial Auditor

BEEF DEVELOPMENT BOARD
STATEMENT OF FINANCIAL POSITION
As at March 31

	2000	1999
ASSETS		
Current assets		
Due from General Revenue Fund (Note 4)	$ 1,231,287	$ 1,415,494
Accounts receivable	---	17,870
Accrued interest receivable	15,558	17,660
	$ 1,246,845	$ 1,451,024
LIABILITIES AND NET ASSETS		
Current liabilities		
Accounts payable	$ 13,000	$ 92
Net assets (Statement 2)	1,233,845	1,450,932
	$ 1,246,845	$ 1,451,024

(See accompanying notes to the financial statements)

BEEF DEVELOPMENT BOARD
STATEMENT OF REVENUE, EXPENDITURE AND NET ASSETS
Year Ended March 31

	Budget 2000 (Note 7)	Actual 2000	Actual 1999
Revenue			
Interest revenue (Note 4)	$ 40,000	$ 62,233	$ 78,625
Total revenue	40,000	62,233	78,625
Expenditure			
Project expenses (Note 5)	847,370	271,855	275,633
Board expenses	5,000	6,598	7,174
Miscellaneous expense	---	867	1,943
Total expenditure	852,370	279,320	284,750
Deficit for the year	$ (812,370)	(217,087)	(206,125)
Net assets, beginning of year		1,450,932	1,657,057
Net assets, end of year - to Statement 1		$ 1,233,845	$ 1,450,932

(See accompanying notes to the financial statements)

BEEF DEVELOPMENT BOARD
NOTES TO THE FINANCIAL STATEMENTS
March 31, 2000

1. Authority and Definition

The Beef Development Board (Board) was established pursuant to Section 4 of *The Agri-Food Act* to administer the Beef Development Plan. The Beef Development Plan was established effective June 28, 1994 to enhance the Saskatchewan beef and beef cattle industry through research, development and promotional activities that the Board considers to be in the best interests of the industry.

The Board administers the Plan through the Beef Development Fund.

2. Significant Accounting Policies

These financial statements are prepared in accordance with generally accepted accounting principles. The following accounting principles are considered significant:

a) Accrual basis

The financial statements are prepared on the accrual basis of accounting.

b) Research and Development projects

Payments for research and development projects are recorded as project expenses when approved and the eligibility criteria, if any, have been met by the recipient.

3. Financial Instruments

Receivables/Payables

These financial instruments include both interest and non-interest bearing items that are due or payable within the next year. Due to this short-term maturity, the carrying value of these financial instruments approximates their fair value.

4. Related Party Transactions

Included in these financial statements are transactions with Saskatchewan Crown agencies related to the Board by virtue of common control or significant influence by the Government of Saskatchewan.

The monies of the Beef Development Board are deposited in the General Revenue Fund. Under this arrangement, interest is calculated on the net position of the Beef Development Board. Interest is allocated by the General Revenue Fund on a quarterly basis using the Government's thirty-day borrowing rate. The Government's average thirty-day borrowing rate for 1999-00 is 4.79%
(1998-99 – 5.04%).

The Board receives the use of office and administrative services from the Department of Agriculture and Food without charge.

Other transactions with related parties and amounts due to/from them are disclosed separately in the financial statements and notes thereto.

5. Research and Development Projects

Project expenses are as follows:

	2000	1999
Veterinary Infectious Disease Organization - University of Saskatchewan	$ 50,400	$ 70,000
University of Saskatchewan	165,335	116,635
Agriculture and Agri-Food Canada	17,720	65,520
Western College of Veterinary Medicine	0	2,600
Saskatchewan Cattle Feeders Association	6,400	6,000
Farm Animal Care Council of Saskatchewan	10,000	14,878
PAMI	8,000	0
Canadian Water Resource Association	14,000	0
	$ 271,855	$ 275,633

6. Commitments

At March 31, 2000, the Board has approved projects for payment in 2000/2001 of $257,489, in 2001/2002 of $106,727, and in 2002/2003 of $58,995.

7. Budget

The Board approved the budget on April 8, 1999.

8. Cash Flow Statement

No cash flow statement is presented because the required cash flow information is readily apparent from the other financial statements.

Project Payments

Please note: The following project payments represent only the payments made in the 1999-2000 fiscal year. These amounts do not reflect total project contract amounts for these initiatives.

Western College of Veterinary Medicine University of Saskatchewan	Health and Feeding Management Strategies for Newly Weaned Calves	$ 10,800.00
Veterinary Infectious Disease Organization, University of Saskatchewan	Vaccine Delivery for Oral Immunization of Calves	$ 6,400.00
Veterinary Infectious Disease Organization, University of Saskatchewan	Investigation of the Role of Bovine Virus Diarrhea Virus and Mycoplasma Bovis in Chronic Pneumonia of Feedlot Cattle	$ 4,000.00
Veterinary Infectious Disease Organization, University of Saskatchewan	Development of Bovine Adenovirus as a Vector	$ 30,000.00
Veterinary Infectious Disease Organization University of Saskatchewan	Novel Vaccine Delivery Methods	$ 14,000.00
Saskatchewan Food Innovation Program, University of Saskatchewan	Beef Product Quality Program	$128,535.00
Saskatchewan Food Talk	Demand for Value Added Beef Products	$ 17,870.00
Department of Agricultural Economics, University of Saskatchewan	An Economic Analysis of Retained Ownership Strategies	$ 6,000.00
Department of Animal & Poultry Science University of Saskatchewan	Development of Rations for Red Veal Production with Holstein Bull Calves	$ 16,000.00
Agriculture And Agri-Food Canada	Fall and Winter Backgrounding of Beef Calves on Pasture	$ 17,720.00
Farm Animal Council Of Saskatchewan (FACS)	Corporate Membership in FACS	$ 5,000.00
Farm Animal Council Of Saskatchewan (FACS)	Core Funding for the Farm Animal Council of Saskatchewan	$ 5,000.00
Saskatchewan Cattle Feeders Association	"Reaching the Roots" Apprising Cattle Producers of Quality Improvement Targets and Management Methods	$ 6,400.00
PAMI	Electric Fence Energizer Evaluations	$ 8,000.00
Canadian Water Resource Association	Field Test Method for Blue-Green Algae Toxins	$ 14,000.00

Appendix

BDF Completed Projects

B001 - SEMEN COLLECTION IN BEEF BULLS WITHOUT ELECTROEJACULATION
-to explore an alternative means to electroejaculation for semen collection from untrained beef bulls
Barth, Albert, Vet Teaching Hospital/Herd Medicine, University of Saskatchewan, 52 Campus Drive, SASKATOON SK S7N 5B4

B002 - MAPPING PRODUCTION AND CARCASS TRAITS BY MICROSATELLITE TYPING IN BEEF REFERENCE FAMILIES
-to make extensive use of the bovine gene map to find genetic linkage between production and carcass quality data and genetic markers in beef reference families, a process known as reverse genetics
Mackay, George, Bova-Can Parentage Testing Inc., 15 Innovation Blvd., SASKATOON SK S7N 2X8

B004 - DEVELOPMENT OF SIMPLE BLOOD TESTS TO IMPROVE DETECTION OF DISEASE
-to develop rapid, accurate, and cost-effective methods for monitoring disease in cattle
-to develop tests to measure aspects of the early inflammatory response which will be of diagnostic and prognostic value
Godson, Dale, VIDO, 120 Veterinary Road, SASKATOON SK S7N 5E3

B005 - THE INDUSTRIAL REORGANIZATION OF THE BEEF PRODUCTION INDUSTRY: SASKATCHEWAN'S NICHE
-to investigate the industrial reorganization that is currently taking place in the beef production industry in North America
–to determine where Saskatchewan's niche can best be developed
-to accomplish preparing a comprehensive business plan which will include a human resource plan, a marketing plan, an operations plan, and a financial plan
Brown, William, Department of Agriculture Economics, University of Saskatchewan, 51 Campus Drive, SASKATOON SK S7N 5A8

B007 - INVESTIGATION OF INTERLEUKIN-8 EXPRESSION IN BOVINE PNEUMONIA AND ARTHRITIS
-to determine whether interleukin-8, a protein made in diseased tissue that acts to cause infiltration of neutrophils (a type that often causes tissue damage), is made in tissues from cattle with naturally occurring pneumonia or arthritis
Sorden, D. Steven, Veterinary Pathology, VIDO, 52 Campus Drive, SASKATOON SK S7N 5B4

B013 - DEMONSTRATION OF AUTOMATED ULTRASOUND GRADING SYSTEM TO COW-CALF OPERATORS, LARGE COMMERCIAL BEEF FEEDLOT OPERATORS AND PURE BREED OPERATORS
-to improve the software package developed in Phase III by providing feedback from demonstrations.
-to improve the usability of the marbling software by understanding the needs of users
-to develop a strategy to market Sask. beef based upon the effective use of predicting carcass grade in cattle destined for Canadian, USA & other international markets
-to evaluate the performance of field tests at bull test stations.
Johannesen, Sharron, Sask Cattle Feeders, Site 12 GB 259 RR4, SASKATOON SK S7K 3J7

B009 - IMMUNOCASTRATION OF BULLS: EFFECTS ON AGGRESSIVE BEHAVIOR AND CARCASS QUALITY

-to eliminate aggressive behavior in feedlot bulls especially during the finishing phase, capitalize on the superior growth, feed efficiency and lean carcass yield observed in bulls, eliminate dark cutting and reduced tenderness observed in bulls and to test an alternative humane castration procedure

van Kessel, A.G., Department of Animal and Poultry Science, University of Saskatchewan, 72 Campus Drive, SASKATOON SK S7N 5B5

B016 - REQUEST FOR DEVELOPMENT OF A BUSINESS PLAN AND INITIAL SEED MONEY FOR THE ESTABLISHMENT OF A BEEF RESEARCH CENTRE

-to develop a business plan and initial seed money for the establishment of a beef research centre

Laarveld, Bernard, Department of Animal and Poultry Science, University of Saskatchewan, 72 Campus Drive, SASKATOON SK S7N 5B5

B019 - ORAL VACCINATION OF NEONATAL CALVES: INDUCTION OF LONG TERM IMMUNITY

The adenovirus vaccine vector offers an effective method to deliver vaccine antigens directly to the site where immune responses first develop in newborn calves and in this way bypass problems associated with the immature system of newborn calves. Furthermore, the delivery of antigens directly to the site where the immune system first develops may induce lifelong immunity. Finally, oral immunization offers the potential advantage of being incorporated with current management practices (i.e. eartagging and dehorning newborn calves)

Griebel, Philip, VIDO, 120 Veterinary Road, SASKATOON SK S7N 5E3

B020 - SERIES OF BOVINE INFORMATION BROCHURES

-to assist both new as well as existing producers. By providing knowledge of the symptoms, cause and treatment of common ailments found in modern cattle production, we hope to reduce the number of downer and condemned animals filtered through the auction markets

Buettner, Adele, Farm Animal Council of Saskatchewan, 502-45th Street West, 2nd Floor, SASKATOON SK S7L 6H2

B023 - ALTERNATIVE METHODS OF SEMEN COLLECTION IN BEEF BULLS

-to develop alternative methods for routine semen collection from untrained beef bulls

Barth, Albert, Vet Teaching Hospital/Herd Medicine, University of Saskatchewan, 52 Campus Drive, SASKATOON SK S7N 5B4

B024 - CATTLE FACS

-to assist both new as well as existing producers

-to provide knowledge of the symptoms, cause and treatment of common ailments found in modern cattle production

Buettner, Adele, Farm Animal Council of Saskatchewan, 502-45th Street West, 2nd Floor, SASKATOON SK S7L 6H2

B025 - A RISK MANAGEMENT OPTION FOR THE SASKATCHEWAN COW-CALF PRODUCER

-to examine the potential benefits of a cow-calf/backgrounder price risk management tool that uses the Chicago Mercantile Exchange Feeder Cattle Futures contracts.

Brown, William, Department of Agriculture Economics, University of Saskatchewan, 51 Campus Drive, SASKATOON SK S7N 5A8

B026 - DEMAND FOR VALUE ADDED BEEF PRODUCTS
-to assess the current and potential status of further processing of manufacturing and grinding beef in Saskatchewan in a Canadian context
-to investigate the consumer preferences of such processed products
-to examine the domestic marketing chain for beef products
Shand, Phyllis, Saskatchewan Food Talk, University of Saskatchewan, 51 Campus Drive SASKATOON SK S7N 5A8

B027 - IMPACTS OF LIVESTOCK PENNING ON GROUNDWATER QUALITY
-to characterize existing feedlots as to the amount and rate of transport of materials from feedlot manure through the unsaturated soil system and the saturated groundwater system
Maule, Charles, Engineering, Agricultural Bioresources, University of Saskatchewan, 57 Campus Drive, SASKATOON SK S7N 5A9

B032 - AN ECONOMIC ANALYSIS OF RETAINED OWNERSHIP STRATEGIES
-to analyze the impact of alternative ownership strategies on other profitability and cash flow of cow/calf producers in Saskatchewan
Brown, William, Department of Agriculture Economics, University of Saskatchewan, 51 Campus Drive, SASKATOON SK S7N 5A8

BDF Ongoing Projects

B010 - BEEF PRODUCT QUALITY PROGRAM
-to establish an applied research and new product development capability specifically for beef
Shand, Phyllis, Sask Food Innovation Program, University of Saskatchewan, 51 Campus Drive, SASKATOON SK S7N 5A8

B015 - INTEGRATED BACKGROUNDING AND FINISHING SYSTEMS FOR SPECIFIC MARKETS (MELFORT PHASE)
-to develop new pasture and forage based systems for lower production costs for backgrounding calves
-to determine the economics of the various new forage backgrounding systems
McCartney, Duane, Ag & Agri-Food Canada, 6000 C & E Trail, LACOMBE AB T4L 1W1

B022 - FALL AND WINTER BACKGROUNDING OF BEEF CALVES ON PASTURE
-to evaluate the production and economic feasibility of growing weaned beef calves from 550lb to 900lb on pasture during fall and winter in southwestern Saskatchewan
Jefferson, Paul, G., Ag & Agri-Food Canada, P.O. Box 1030, SWIFT CURRENT SK S9H 3X2

B018 - BOVINE TRICHOMONIASIS: PREVALENCE IN SASKATCHEWAN AND IMPROVED DIAGNOSTIC METHODS
-to survey veterinary practitioners for accurate data on the prevalence and risk factors for infections
-to improve test and make available to laboratories and veterinarians
Campbell, John, R., Department of Herd Medicine & Theriogenology University of Saskatchewan, 52 Campus Drive, SASKATOON SK S7N 5B4

B021 - TO ESTABLISH "SASKBEEF" AS A NEUTRAL BEEF INDUSTRY FORUM
-to bring all stakeholders, involved in the development of the beef industry in Saskatchewan, together in an ongoing open forum.
-to provide an industry-wide team approach to promote the development of the beef industry
Braaten, Milt, Sask Catttle Feeders Association, Box 116, ABBEY SK S0N 0A0

B028 - OPTIMIZING PASTURE PRODUCTION BY USING MIXTURE OF NATIVE SHRUBS AND LEGUMES IN SOUTHWESTERN SASKATCHEWAN
-to optimize mixtures of shrubs and forbs for economical production of pasture
-to obtain better understanding of mutual benefit of combinations of native forage shrubs and legumes to further improve their productivity
Schellenberg, M.P., Ag & Agri-Food Canada, Box 1030, SWIFT CURRENT, SK, S9H 3X2

B029 - CORE FUNDING FOR THE FOUNDATION FOR ANIMAL CARE SASKATCHEWAN INC
-to secure a 3 year Corporate Membership from the Saskatchewan Beef Development Fund to contribute as a Core Funder
Buettner, Adele, Farm Animal Council of Saskatchewan, 502-45th Street West, 2nd Floor, SASKATOON SK S7L 6H2

B030 - NOVEL VACCINE DELIVERY METHODS
-to examine methods of vaccine delivery, intranasal and transdermal
-to complement the ongoing research in this area at VIDO
Baca-Estrada, Maria, VIDO, 120 Veterinary Road, SASKATOON SK S7N 5E3

B031 - DEVELOPMENT OF BOVINE ADENOVIRUS AS A VECTOR
-to develop adenovirus as a vector to deliver vaccines to mucosal surfaces
Babiuk, Lorne, VIDO, 120 Veterinary Road, SASKATOON SK S7N 5E3

B033 - "REACHING THE ROOTS" APPRISING CATTLE PRODUCERS OF QUALITY IMPROVEMENT TARGETS AND MANAGEMENT METHODS
-to increase the awareness of factors influencing the quality and safety of beef products "from pasture to plate"
Johannesen, Sharron, Sask Cattle Feeders Association, Site 12 GB 259 RR4, SASKATOON SK S7K 3J7

B034 - FIELD TEST METHOD FOR BLUE-GREEN ALGAE TOXINS
-to develop and verify a cost-effective and practical field test kit that can be used to detect the presence or absence of the toxins produced by blue-green algae within any type of water supply prone to their growth
Bauer, Jim, Canadian Water Resources Association, P.O. Box 1329, CAMBRIDGE ON N1R 7G6

B035 - DEVELOPMENT OF RATIONS FOR RED VEAL PRODUCTION WITH HOLSTEIN BULL CALVES
-to develop and evaluate cereal grain based rations for production of red veal
Christensen, David, Department of Animal and Poultry Science, University of Saskatchewan, 72 Campus Drive, SASKATOON SK S7N 5B5

B036 - HEALTH AND FEEDING MANAGEMENT STRATEGIES FOR NEWLY WEANED CALVES
-to develop receiving protocols and restricted feeding programs for cattle backgrounded and finished under Saskatchewan environmental conditions
Campbell, John, R., Department of Herd Medicine & Theriogenology, University of Saskatchewan, 52 Campus Drive, SASKATOON SK S7N 5B4

B037 - ELECTRIC FENCE ENERGIZER EVALUATIONS
-to evaluate a maximum of twelve electric fence energizers for effectiveness of this operation. These evaluations will be available to the public through PAMI's information services
Lucyshyn, Troy, PAMI, Box 1150, HUMBOLDT, SK, S0K 2A0

B039 - VACCINE DELIVERY FOR ORAL IMMUNIZATION OF CALVES
-to develop vaccine delivery systems to orally immunize newborn calves
Griebel, Philip, VIDO, 120 Veterinary Road, SASKATOON SK S7N 5E3

B041 - INVESTIGATION OF THE ROLE OF BOVINE VIRUS DIARRHEA VIRUS AND MYCOPLASMA BOVIS IN CHRONIC PNEUMONIA OF FEEDLOT CATTLE
-to clearly define BVD virus, mycoplasma bovis and other agents in chronic pneumonia in feedlot cattle
Wobeser, A. Gary, WCVM, University of Saskatchewan, 52 Campus Drive, SASKATOON SK S7N 5B4

B042 - CORPORATE MEMBERSHIP IN FACS
-to secure a three year Corporate Membership from the Saskatchewan Beef Development fund to contribute as a support the Farm Animal Council's Core Activities
Buettner, Adele, Farm Animal Council, 502-45th Street West, 2nd Floor, SASKATOON, SK, S7L 6H2